

Annual Report of Operations for Year 2021

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:
WAG13025
Facility & Owner Information
Facility Name: Chief Joseph Hatchery
Operator Name (Permittee): Matt McDaniel & Joe Peone
Address: P.O. Box 150 Nespelem, Wa 99155
Email: Phone: matthew.mcdaniel.fnw@colvilletribes.co 509-631-1870
Owner Name (if different from operator): Colville Confederated Tribes
Email: Phone:
Best Management Practices (BMP) Plan
Has the BMP Plan been reviewed this year? ■ Yes □ No Does the BMP Plan fulfill the requirements of the General Permit? ■ Yes □ No
Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary. No changes have been made since to the BMP since the last annual report.
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Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): 753,255 lbs Pounds of food fed to fish during the maximum month: 24,192 lbs

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
BY- 19 SEG Sp CK	82,798.4	Columbia River	April 2021
BY- 19 SEG Su CK	41,578.4	Columbia River	April 2021
BY- 20 SEG Su CK	1,842.6	Columbia River	June 2021
BY- 20 INT Su CK	633.2	Transferred off station	April 2021
BY- 20 INT Sp CK	10,346.5	Transferred Off Station	Nov 2021
BY- 20 INT Su CK	15,076.2	Transferred Off Station	Oct 2021
BY- 20 INT Su CK	7,092.3	Transferred Off Station	Nov 2021

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	103,389.2	17,580	July	26,886.2	14,817
February	124,641.7	19,407	August	53,415.7	16,039
March	127,286.5	23,786	September	73,740.5	24,192
April	312.4	6,843	October	58,595.8	12,286
May	15,128.5	6,511	November	63,692	12,494
June	22,803.1	8,372	December	83,363.4	12,848

Additional Comments: See Additional Sheet for Species, fish produced, Receiving water, and Month Released information.

Operations and Production

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Pounds of food fed to fish during the maximum month: 24,192 lbs	

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
BY- 20 SEG Sp CK	58,217.4	Currently On Station	April 2022
BY- 20 SEG Su CK	25,146	Currently On Station	April 2022

Fill in the table below with production numbers from the past year. List the $\mathbf{maximum}$ amount of fish on-site and the maximum amount of food fed \mathbf{per} \mathbf{month} .

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January			July		
February			August		
March			September		
April			October		
May			November		
June			December		

Additional Comments:		

Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
Eggs, juvenile, and adult mortalities	Jan- Dec 2021	Landfill
Additional Comments:		

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
· · · · · · · · · · · · · · · · · · ·			
Additional Com	ments:		

Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.
No noncompliance events to report.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired

Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year**. Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
□ Yes ■ No	Azithromycin
□ Yes ■ No	Chloramine-T: See additional reporting requirements on page 7
□ Yes ■ No	Chlorine
□ Yes ■ No	Draxxin
□ Yes ■ No	Erythromycin - injectable
□ Yes ■ No	Erythromycin - medicated feed
■ Yes	Florfenicol (Aquaflor)
■ Yes	Formalin - 37% formaldehyde: See additional reporting requirements on page 7
■ Yes	Herbicide - describe: Diquat was used to treat adults
☐ Yes ☐ No	Hormone - describe:
■ Yes	Hydrogen Peroxide: See additional reporting requirements on page 7
■ Yes □ No	lodine: See additional reporting requirements on page 7
□ Yes ■ No	Oxytetracycline
□ Yes ■ No	Potassium Permanganate: See additional reporting requirements on page 7
□ Yes ■ No	Romet
□ Yes ■ No	SLICE (emamectin benzoate)
■ Yes □ No	Sodium Chloride - salt
□ Yes ■ No	Vibrio vaccine
□ Yes □ No	Other:
□ Yes □ No	Other:

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: Parasite-S		Generic Name: Formalin 37% formaldahyde	
Reason for use: Control Saprolegnia Fungus			
■ Preventative/Prophylactic □ As-needed	Total quantity of formulated product per treatment (specify units) Varies	Total quantity of formulated p (specify units): 304.2 gall	
Date(s) of treatment: Jan 2021- Dec 2021			Total number of treatments in past year: 113
Maximum daily volume of treated water: 25,786,390 mgd	Treatment concentration (specify units): 167 ppm	Duration and frequency of treat Varies 15- 60 min a	
Method of application:	☐ Static Bath ☐ Flow-through	☐ Medicated Feed ☐ Other (describe):	
Location in facility chemical was used (check all that apply):	Raceways Incubation building	☐ Ponds ☐ Off-line settling basin	☐ Other (describe):
Where did water treated with this chemical go? (check all that apply):	☐ Discharged w/o treatment☐ Settling basin	☐ Septic System ☐ Publicly owned treatment works	☐ Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			
Brand Name: 35% Perox-	· Aid	Generic Name: 35% Hydr	rogen Peroxide
D f	Aid ectious copepods on a		rogen Peroxide
D f			roduct used in past year
Reason for use: Control Inf	rectious copepods on a Total quantity of formulated product per treatment:	adult summerchinook Total quantity of formulated p	roduct used in past year
Reason for use: Control Inf Preventative/Prophylactic As-needed Date(s) of treatment:	rectious copepods on a Total quantity of formulated product per treatment:	adult summerchinook Total quantity of formulated p	roduct used in past year Total number of treatments in past year: 5
Reason for use: Control Inf Preventative/Prophylactic As-needed Date(s) of treatment: August 2021- September Maximum daily volume of treated water:	Total quantity of formulated product per treatment: Varies 2021 Treatment concentration (specify units):	Total quantity of formulated p (specify units):	roduct used in past year Total number of treatments in past year: 5
Reason for use: Control Inf Preventative/Prophylactic As-needed Date(s) of treatment: August 2021- September Maximum daily volume of treated water: 25,786,390 mgd	Total quantity of formulated product per treatment: Varies 2021 Treatment concentration (specify units): 75 ppm Static Bath	Duration and frequency of treat	roduct used in past year Total number of treatments in past year: 5
Reason for use: Control Inf Preventative/Prophylactic As-needed Date(s) of treatment: August 2021- September Maximum daily volume of treated water: 25,786,390 mgd Method of application: Location in facility chemical was used	Total quantity of formulated product per treatment: Varies 2021 Treatment concentration (specify units): 75 ppm Static Bath Flow-through	Duration and frequency of treat 60 minutes Medicated Feed Other (describe): Ponds	roduct used in past year Total number of treatments in past year: 5 tment(s):

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: Ovadine		Generic Name: PVP Ovadine	
Reason for use: Equipment and fish egg disinfection			
■ Preventative/Prophylactic □ As-needed	Total quantity of formulated product per treatment (specify units):Varies	Total quantity of formulated po (specify units): 220 gallor	roduct used in past year
Date(s) of treatment: January- December 2	2021		Total number of treatments in past year: Varies
Maximum daily volume of treated water: 25,786,390 mgd	Treatment concentration (specify units): 100 ppm	Duration and frequency of treat Varies 10- 60 minut	
Method of application:	■ Static Bath □ Flow-through	☐ Medicated Feed ☐ Other (describe):	
Location in facility chemical was used (check all that apply):	☐ Raceways ☐ Incubation building	☐ Ponds ☐ Off-line settling basin	☐ Other (describe):
Where did water treated with this chemical go? (check all that apply):	■ Discharged w/o treatment ■ Settling basin	☐ Septic System ☐ Publicly owned treatment works	☐ Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			
Brand Name:		Generic Name:	
Brand Name: Reason for use:		Generic Name:	
	Total quantity of formulated product per treatment:	Generic Name: Total quantity of formulated properties of the control of the cont	roduct used in past year
Reason for use:		Total quantity of formulated p	roduct used in past year Total number of treatments in past year:
Reason for use: Preventative/Prophylactic As-needed		Total quantity of formulated p	Total number of treatments in past year:
Reason for use: Preventative/Prophylactic As-needed Date(s) of treatment: Maximum daily volume of	product per treatment: Treatment concentration	Total quantity of formulated properties (specify units):	Total number of treatments in past year:
Reason for use: Preventative/Prophylactic As-needed Date(s) of treatment: Maximum daily volume of treated water:	Treatment concentration (specify units):	Total quantity of formulated processing (specify units): Duration and frequency of treat Medicated Feed	Total number of treatments in past year:
Reason for use: Preventative/Prophylactic As-needed Date(s) of treatment: Maximum daily volume of treated water: Method of application: Location in facility chemical was used	Treatment concentration (specify units): Static Bath Flow-through Raceways	Total quantity of formulated processing (specify units): Duration and frequency of treat Medicated Feed Other (describe):	Total number of treatments in past year: ment(s):

Aquaculture Drugs and Chemicals (cont'd) Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments		
Tank Volume	2934	Liters
Desired Static Bath Treatment Concentration	100,000	μg/L
Volume of Product Needed	29.3	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: .0006418 L/min Active Ingredient: 1.0%	⊞ Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	17,369,831 mgd	Specify Units
Maximum % of Facility Discharge Treated	.06418	% of Total Discharge

Flow-Through Treatments		
Tank Volume	367,364	Liters
Calculated Flow Rate	1,893	Liters/Minute
Duration of Treatment	60	Minutes
Desired Flow-Through Treatment Concentration of Product	100,000	μg/L
Amount of Product to Add Initially	N/A	Liters Product
Amount of Product to Add During Treatment	757	mL/Minute
Total Volume of Product Needed	45.42	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: .000016658L/ min Active Ingredient: 35%	₽ Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	17,369,831 mgd	Specify Units
Maximum % of Facility Discharge Treated	.0995	% of Total Discharge

Aquaculture Drugs and Chemicals (cont'd) Additional Reporting Requirements for Water-Borne Treatments

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- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
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Static Bath Treatments		
Tank Volume		Liters
Desired Static Bath Treatment Concentration		μg/L
Volume of Product Needed		Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: Active Ingredient:	Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day		Specify Units
Maximum % of Facility Discharge Treated		% of Total Discharge
Flow-	-Through Treatments	
Tank Volume	91,841	Liters
Calculated Flow Rate	1,893	Liters/Minute
Duration of Treatment	60	Minutes
Desired Flow-Through Treatment Concentration of Product	167,000	μg/L
Amount of Product to Add Initially	N/A	Liters Product
Amount of Product to Add During Treatment	316	mL/Minute
Total Volume of Product Needed	18,963	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: .0069224198 L/ min Active Ingredient: 100%	+ Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	578,994 gal/ day	Specify Units
Maximum % of Facility Discharge Treated	3.28	% of Total Discharge

Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.	

Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Matthew T McDaniel	Chief Joseph Hatchary Manager
Printed name of person signing	Title
Moude & Messil	Jan 19 2022
Applicant Signature	Date Signed

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191

Washington Hatchery Annual Report

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Seattle, WA 98101-3140